

ANGOLA



1. INTRODUCTION

Angola has been war-ravaged by war for the past three decades which ended in 2002. During this prolonged period of civil war, over 330 000 Angolans fled into neighbouring countries, and many more were displaced within Angola. The war involved widespread destruction of infrastructure, and much of the land now contains landmines. Tension remains high in the oil-rich Cabinda Province, which has struggled for independence from Angola since the mid-1970s.

According to the IMF, the Angolan economy grew by 14.7% in 2005 (compared to 4.6% for other countries in sub-Saharan Africa) mainly due to increased oil production and diamond exports. Angola is the second-largest producer of oil in sub-Saharan Africa, and the recent rise of oil prices may push GDP growth as high as 26% in 2006. Despite good economic potential, Angola remains plagued by poverty and poor education.

Four years of peace have re-opened Angola to international lending, enabling the government to invest in social services. Three million refugees, primarily women and children, have returned to their homes in Angola since the end of the civil war in 2002. Most have resettled in isolated and heavily damaged provinces, taxing local resources. Unexploded mines left over from the war are a serious threat to safety and prevent agricultural renewal in some parts of the country.

Table 1: Basic Economic Indicators, Angola, 2005¹

Population (2005)	15,900,000
Languages	Official language: Portuguese. Local languages: Kikongo, Chokwe, Mbundu, Kwanyama.
2005 Economic activity (% of GDP)	Agriculture: 7.9; Industry: 65.8; Services: 26.4.
Human Development Index	0.439(2004)
Per capita Gross National Income	2004: 930 USD; 2005: 1,350 USD

2. EDUCATION SYSTEM

The civil war has exacted its toll on the education system in Angola. Primary education lasts 8 years in three cycles of 4, 2 and 2 respectively. School going age is mostly 6years but may also be later. The first 4 years are compulsory. Secondary education offers a choice of either general education or vocational education. General education lasts for 3 years from the age of 14 whilst vocational education lasts for 4 years from the age of 14². There are also two to three-year specialized pre-university courses running in parallel.

Angola has one state university, the University of Angola. The Rector is appointed by the President of the Republic and the directors of faculties and schools are appointed by the Minister of Education on the Rector's recommendation. Angola also has a private institution, the Universidade Católica de Angola (Catholic University of Angola) which was established more recently.

Teacher education takes place in various teacher training institutes. Primary school teachers are trained for 2 years in primary teacher training centres for first level primary teachers and in Institutos Medios Normales (IMN) where studies last for four years. Teachers for the first cycle of secondary education are trained in teacher training schools. There are also physical education schools. Second cycle secondary school teachers are trained at the Instituto Superior de Ciências de Educação (ISCED) of the University of Angola. Higher education teachers are trained at the University.

There are also distance education programmes to upgrade unqualified teachers offered by the ISCED. Teachers can also follow distance education courses to upgrade their professional training³.

Table 2: Education Indicators⁴

Enrolment in Primary Education (% gross)	64.3 (2000)
Enrolment in Secondary Education (% gross)	14.7 (2000)
Enrolment in Tertiary Education (%gross)	0.8 (2004)

Gender Parity Index (GPI)	0.66 at University
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Evidently the primary and secondary enrolment ratios are low. There are very few secondary schools in Angola - only about 70. Millions of children do not attend school for reasons ranging from poor water and sanitation to inability to pay school fees. Schools are plagued by overcrowded or multi-age classrooms, teacher shortages and inadequate learning materials and infrastructure. Whilst school enrolment rates increased slightly in 2005, the country faces the huge challenge of raising the number of children in primary school from an estimated 2.1 million in 2003 to 5 million by 2015, in order to achieve universal primary education—while keeping up with the rapid growth of the school-age population.

HIV/AIDS prevalence rates are low in Angola relative to neighbouring countries in Africa, but so is awareness of how the disease is spread. Even teachers remain largely uninformed. The government has made fighting HIV/AIDS a national priority, setting up agencies to provide counselling and testing and to teach prevention techniques. The nationwide Defend Life, Learn About AIDS campaign trained 9,500 teachers and distributed educational manuals to 600,000 students, informing them about the risks of AIDS and other sexually transmitted infections.

3. INFRASTRUCTURE

Angola's infrastructure has been decimated by the civil war. Until 2002 there were a total of 90 000 fixed lines, mainly in Luanda and urban areas. The government is trying to rectify the lack of infrastructure by introducing competition to the state owned mobile provider in 2001 and the introduction of four fixed line operators. Since the licensing of mobile operators in 2000, the country has grown from 20 000 users (on the incumbent's network) to over 150 000⁵.

Table 3: ICT Infrastructure Indicators, 2005⁶

Fixed line subscribers (2004)	per 1000 persons
Mobile Subscribers (2004)	940 per 1000 persons
Dial-up subscribers (2004)	0.9 per 1000 persons
Broadband subscribers (2004)	0.0 per 1000 persons
Internet users (2004)	172.0 per 1000 persons
Television broadcast stations (2000)	6
Radio stations(2000)	AM 21, FM 6, Shortwave 7.

The liberalization of the telecoms sector began in 2001 with the licensing of a second GSM operator to compete with the national mobile operator. In July 2002 four new competitive fixed-line operators were licensed to compete with the national monopoly operator, using Third Generation (3G) wireless technologies and WiMAX to provide advanced services. This sector will now become one of the most competitive and liberalized in SADC - resulting in a rapid investment in communications services - and benefits to society at large. This should encourage costs to fall and service take-up to increase rapidly⁷. Mobile market penetration is also still relatively low at around 14%, despite rapid growth since the introduction of competition in 2001. A third mobile licence was expected in 2006⁸.

4. POLICY FRAMEWORK

The Angolan government created the National Commission for Information Technology in 2002. The Commission's first task was to elaborate a plan for the development of IT called the

Strategy for the Development of Information Technology 2000 - 2010. In the strategy, the National Commission argues that it is necessary to “set out the whole problem that implicates the massive introduction of Information Technology, a situation that will affect the whole economic and social structure of Angola, the State should define a national policy for Information Technology”⁹

The Commission has also created an Excellence Center for the implementation of the projects in the plan. The Center, named CENAPATI, is at the moment responsible for the Academic and Scientific Backbone. Considering the Private Sector Enterprises as essential partners, the Commission held in July 2002 a meeting in Luanda with several of the business agents of this sectors and settled with them Collaboration Schemes for the next years. The Commission, through CENAPATI, is conducting some projects including e-government and telecentres^x.

In 2006, the government announced the establishment of a new Information Technology Agency to replace the National Commission. The new institution will try to create places of quality for the use of new information technologies that will be the model of analysis and reproduction.

Angola does not have a dedicated ICTs in Education policy.

5. MAJOR INITIATIVES:

A number of humanitarian initiatives have been under way to reconstruct Angolan economy and society over the past few years. In 2002 it was estimated that there were just over 300 NGOs, aid agencies and CBOs active in Angola working to avert a potential humanitarian disaster of famine^{xi}.

According to the IDRC, an estimated 8000 NGO workers and volunteers are engaged in social rebuilding and food distribution activities in more than 20 centres around the country, representing an enormous work-force which requires the latest in communications technology. Inmarsat Mini-M sat-phones, Ham radio, HF backbone networks, VSAT stations, email and the humble long-distance telephone line have been utilized to support these efforts. The preferred mode of communicating with field staff is definitely email - due to its hard-copy format and improved speed over fax - and email is also being carried over sat-phones, HF and ham radio equipment and slow-speed dial-up lines.

Programs and projects aimed at reconstructing Angola’s education system, are largely supported by UN development agencies such as UNICEF, UNESCO and UNDP as well as organizations such as Save the Children. Some of these broad education projects incorporate specific references to ICTs albeit limited. They include the UNICEF-supported Quality Primary Education Project which incorporates the establishment of an EMIS system as well as the recently announced centre for the study of science supported by Japanese co-operation, announced by the Angolan Deputy Ministry of Education^{xii}. Similarly UNESCO has committed to supported teacher development in Angola which will incorporate distance education programs^{xiii}. Some of the major initiatives related to ICTs in Education are listed below.

5.1 Angonet | www.angonet.org

The AngoNet project was initiated in Luanda in 1989, as a project facilitated by Development Workshop (DW) with Canadian funding support. For a number of years AngoNet provided Angola’s only public access to international electronic networks by e-mail through non-profit APC servers in Europe and Southern Africa.<BR

With the emergence of commercial Internet Service Providers (ISPs) in the late 1990’s in Angola, AngoNet dedicated itself to provide a non-profit network service for organisations and individuals working in social and economic development and humanitarian assistance

programmes in Angola. AngoNet is a project supported by Development Workshop and funded by UNDP that aims to increase the capacity of non-profit, civic and development organisations working in Angola, through improved communications and information exchange. AngoNet operates as a network of humanitarian NGOs and projects operating in Angola. AngoNet provides Internet access and support services to Angolan NGOs. Its partners include Development Workshop, Church Action in Angola, Christian Aid, Dutch Institute for Southern Africa, One World Action, CONGA Comité das Organizações Não-Governamentais Angolanas, Programa das Nações Unidas para o Desenvolvimento Sustentável, - UTCAH, Unidade Técnica de Coordenação de Ajuda Humanitária, Usuários da AngoNet, Rede de APC (rede internacional de ONGs). Among its regional networks include Sangonet in South Africa, MANGO in Zimbabwe, Ebonet which is an Angolan ISP, SARDC Centro de Documentação Regional de Africa Austral, AIA Africa Information Afrique and Cronica Informativa sobre a Africa Austral

Specific services offered by Angonet include Internet connectivity provision, web-hosting, web projects based on created templates and support for telecentres in Luanda, Huambo and Malange who offer internet access, photocopying and document typing services to their communities.

5.2 Discovery Channel Global Education Fund | <http://www.discoverygloaled.org>

Discovery Channel Global Education Partnership is a 501(c)(3), nonprofit, public, charitable organization headquartered in the USA, dedicated to reaching across the global information divide with the tools and training necessary to extend the power of technology and information to under-resourced communities around the world.

In Angola, the DCGEP partnered with the Angolan Ministry of Education and Culture, in reaching out to teachers, children and students of all ages by providing technology and resources that help increase engagement with - and commitment to - the learning process. These resources include video machines, televisions and education content which can be used in the classroom to support learning and teaching. The Partnership increases teacher effectiveness by equipping instructors with interactive and creative teaching methodologies that employ relevant video programming to complement curricular objectives.

With the support of the Cabinda Gulf Oil Company, the Partnership established 6 Learning Centers in Cabinda province, and with Chevron's support, 13 Learning Centers in Bengo and Huambo provinces. These particular provinces experienced heavy fighting during the war. The Learning Center project is designed to reach out to vulnerable, internally displaced populations.

Chevron is also supporting the project's expansion into Luanda and Zaire province. Historically, Zaire has been one of the least developed and least populated of Angola's 18 provinces.

5.3 Quality Primary Education Project^{xiv}

UNICEF launched a Quality Primary Education Project which forms the core part of their 2005-2008 Education Programme and which focuses on the formal primary education system. This project is designed to be a stepping stone to the achievement of Education for All by 2015.

Support is being provided for the establishment of national goals, strategies and programmes, with a view to expanding access to child-friendly, effective and healthy schools. This includes the improved teacher training strategies, mechanisms for supervision, targeted community-involved school construction (including water and sanitation facilities) and standards on hygiene and sanitation for different types of schools, as well as strategies to reach children in isolated areas.

The project also aims to support innovation in primary schools, through the development of teaching and learning materials to implement education reform at the national level, as well as specific support for implementation in targeted municipalities.

Greater community involvement in the development, planning, managing, monitoring and evaluation of education within their communities is promoted, with schools being used as a focal point for change at the community level. The training provided will be focused on participative methodologies to be used in the classroom, as well as gender sensitivity issues and the promotion of girls' participation.

EMIS

A nationwide rapid school mapping and data collection exercise is being undertaken as a first step in the development of a comprehensive Education Management Information System (EMIS). The data refers to teaching staff, student enrolment, and school infrastructure.

Specific qualitative studies focusing on girls' education and its characteristics in Angola will be undertaken to complement the collection of gender-disaggregated education data through school mapping and the development of an EMIS. In combination with a national seminar on girls' education to be held in the second half of the year, support will be provided to the launch of the United Nations Girls' Education Initiative, UNGEI, in Angola.

UNGEI will result in a girls' education priority action plan and support will be provided to implement selected priority actions for girls' education, including the required capacity building of the gender unit and raising gender awareness throughout the education system and society.

Through the Schools for Africa Initiative, and to address one of the most serious constraints to school attendance, new construction is being conducted in approximately 350 locations and 1,150 schools are due to receive rehabilitation of existing structures, such as the installation of windows, roofing and sanitation facilities. Refreshment in-service training is planned to be provided for 78,000 teachers in order to increase the quality of instruction. Attention is also paid to life skills education, including gender sensitivity, hygiene education, prevention of HIV and mine-awareness.

The key activities to be carried out during 2005-08 are as follows:

- Support girls' education interventions under the framework of a national priority plan for girls' education and UNGEI.
- Advocate for mainstreaming competency-based learning within national education reform.
- Capacity building for national, provincial and municipal Education Officers
- Support the development of a Teacher Training Masterplan
- In-service teacher training for 78,000 teachers
- Distance education oriented to under-qualified teachers
- Support establishment of standards of educational outcomes and learning achievement testing.
- Design, produce and disseminate teaching packages and teaching and learning materials.
- Training of school directors to encourage teachers to practice effective methods of teaching that are child/girl-friendly.
- Train 1,000 pedagogical supervisors in monitoring the quality of instruction supervisors
- Construct 350 new schools and rehabilitate 1,150 schools including provision of basic school materials and ensuring all targeted schools have access to water and sanitation
- Provide hygiene education and conduct de-worming campaign in all primary schools.
- Undertake social mobilization activities to ensure community ownership of the water supply and sanitation facilities and their active role in the management of the school.

Schlumberger Excellence in Education Development (SEED) | <http://www.seed.slb.com>

SEED is a global non-profit education program that serves students aged 10-18. SEED has grown out of the spirit of goodwill and close ties between Schlumberger people and the communities where they live and work.

SEED began in 1998 as a way for Schlumberger employees, spouses and retirees to share their time, experience and passion for learning and science through a variety of volunteer activities with younger generations of learners.

SEED provides access to technological and knowledge resources for underserved students and teachers in communities where Schlumberger people live and work. These include a range of project-based activities provided through an extensive multilingual website, hands-on science education workshops, and collaborative international projects. In these ways, SEED is building a learning community that creates connections among youth around the world and expands their understanding of science. In addition, the SEED Action Fund provides financing to young people for local initiatives addressing sustainability issues in their communities, for example in relation to water and energy.

SEED plans and carries out activities through different programs one of which is its School Network Program which invites qualified underserved schools to apply for funding that supports *Infrastructure*: Providing technical and financial support to connect underserved educational organizations to the Internet; *Collaboration*: Facilitating opportunities to participate in projects, events and partnerships with other educational organizations and *Sustainability*: Helping schools ensure continuity of the program after the initial grant.

Through this program SEED supported 188 schools serving more than 225,000 children in 37 countries worldwide. In Angola, SEED supported two primary schools where it established along with its West and South Africa GeoMarket, computer rooms including power, light, desks, computers and a new telephone line for the network connection. Twenty PCs were re-configured with Portuguese operating systems and installed by Schlumberger engineers. It was intended that up to twenty secondary schools will receive similar donations by Schlumberger. It appears that this plan did not materialize.

SchoolNet Angola

The history of SchoolNet Angola dates back to 1998/9 with a kick-start process initiated by the Angola Educational Assistance Fund (AEAF). Through this process five schools have been provided with two PCs connected to the Internet in partnership with the local ISP, Ebonet.

IDRC's Acacia Program supported the SchoolNet Angola initiative since 2000 to some extent. A report published by the International Development Research Centre (IDRC) in September 2002 notes a positive assessment that was made of the SchoolNet project that was initiated in 2000. The initial three schools are still on-line with the University and with a broadband radio connection to the service provider Ebonet. The services were being used by pupils - although not to the full capacity of the dedicated 256kbps radio links. Ebonet is keen to support further development of this concept and is working with several oil companies who are prepared to offer financial support for system set-up and establishment in other schools. A fourth school was equipped with twenty PC's and Internet access thanks to a donation by Schlumberger, an international oil company.^{xv}.

SchoolNet Africa subsequently assisted with the formal re-establishment of SchoolNet Angola in 2004 in partnership with OSISA. A schoolnet champion was identified to lead the process in Angola and 5 schools was initially involved in the programme. The program also included a teacher training program supported by Microsoft West East and Central Africa (WECA)'s Partners in Learning Program in collaboration with SchoolNet Africa's Global Teenager Project and Mtandao Afrika Project at the time. SchoolNet Africa also partnered with Multichoice Africa in support of teacher training in the use of ICTs. A computer installation and training project was considered at a centre in Benguela Province with the support of OSISA and SchoolNet Namibia. These attempts have not been successful. The Schoolnet Angola project has since then been defunct.

Catholic University of Angola | www.ucan.edu

Angola's first private institution of higher learning, the Catholic University of Angola (CUA) was established in the early 1990s with the support of His Eminence Alexandre Cardinal do Nascimento and the Roman Catholic Church of Angola. The Catholic University has a Centros Informatica (Information Centre) which is a computer centre available to its students and lecturers. The Catholic University also has a computer engineering department (CED) on its main campus which historically hosted a program in partnership with Angolan Education Assistance Fund (AEAF) which provided computer skills and continuing education programs to the community at large. Its goal was also to build capacity among students to conduct ICT related research^{xvi}.

Angola also has one state university called Universidade Angustinho Neto (http://www.uan-angola.org/pgcategory_acerca.php) and an education institution called Universidade Jean Piaget de Angola. (www.netangola.com/piaget). Both have active websites.

8. ENABLING AND CONSTRAINING FACTORS

The table below provides a brief overview of the current stage of development on ICTs in education in Angola.

Variables	Enabling	Constraining
Policy Framework & Implementation	Angola has a national ICT policy. Little reference is made specifically to education. Because the emphasis of the country's social upliftment programs is based on reconstructing the education system, the emphasis is on building schools, acquiring desks, developing teachers and encouraging more learners to participate in the education system.	Angola does not have a dedicated national policy on ICTs in education.
Advocacy Leadership	The Angolan government has a dedicated agency tasked to address its national IT strategy.	Within education, there are no dedicated structures advocating and promoting ICTs in education and some attempts over the past few years have been aborted as a result
		There are no explicit references to

Gender Equity re access to ICTs	A sizeable number of education projects supported by UN agencies such as UNICEF have earmarked dedicated projects for the advancement of girls and women. UNICEF-supported EMIS project also aims to track girl participation in schools	ICT access to promote gender equality or women and girls empowerment.
Infrastructure & Access	The national ICT infrastructure in general appears to be improving with the advent of liberalization of the ICT market in 2002.	The national ICT infrastructure remains very poor in Angola. Access to ICTs in education system remains very low and the scale of projects under way are very small, involving small numbers of schools.
Collaborating mechanisms		Whilst there are attempts at collaboration between Ministries of Education and other Ministries, the private sector and civil society institutions, there are no explicit collaborating mechanisms in place as yet
Human Resource Capacity	Civil society organisations have created some capacity with the support of AngoNet	There remains a very limited layer of skilled personnel and champions within the Angolan government and even less in the Ministry of Education .
Fiscal Resources		There remains significant dependence on external donor funding for ICT projects including from UN agencies and the private sector.
Learning content	Some projects have developed localised versions of their programs in Portuguese. These include the SEED and Discovery Channel projects	Local contextually relevant learning content is currently lacking although there are attempts by the MoET to try to address this.
Procurement regulations		There are no stated procurement regulations to support greater ICT access
Attitudes	Some of the leaders in Government recognise the importance of ICTs for development and have projected a positive attitude to this	Positive attitudes among some champions in Government and civil society have not translated into larger scale successful ICT programs in the education sector.

CONTACTS

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ENDNOTES

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